Local Energy Ordinances Being Considered for Adoption

The following local energy ordinances are being considered for adoption in the City of Encinitas:

- Residential energy efficiency (retrofits);
- Residential electrification (new construction);
- Non-residential energy efficiency;
- Non-residential solar photovoltaics; and
- Non-residential electrification.

Currently, language for all ordinances have been developed **except** for the residential and non-residential electrification ordinances.

Residential Energy Efficiency (Retrofits)

Retrofits of existing single and multi-family residential units may be required to incorporate one or more energy efficiency measures depending on the scope of the project and vintage (Table 1).

Table 1. Energy Efficiency Requirements for Residential Retrofits

Energy Efficiency Measure	Requirement Details	Single-Family Retrofits (Vintage)	Multi-Family Retrofits (Vintage)
Attic Insulation	Add attic insulation in buildings with vented attic spaces to meet R-38.	NA	Pre-1978
Duct Sealing	Air seal all ductwork to meet the requirements of the 2019 Title 24 Section 150.2(b)1E.	Pre-1978	Pre-1978 1978-1991
Cool Roof	For steep slope roofs, install a roofing product rated by the Cool Roof Rating Council (CRRC) with an aged solar reflectance of 0.25 or higher and thermal emittance of 0.75 or higher.	Pre-1978	Pre-1978 1978-1991
Water Heating Package	 (1) Add R-6 insulation to the exterior of existing residential tank storage water heaters; (2) Insulate all accessible hot water pipes with R-3 pipe insulation; and (3) Upgrade sink and shower fittings to meet current CALGreen requirements. 	All vintages	All vintages
Lighting	(1) Replace screw-in incandescent lamps and compact fluorescent lamps (CFLs) with screw-in light emitting diode (LED) lamps; and (2) Install manual on - automatic off vacancy sensors that meet the requirements of Title 24 Section 110.9(b)4.	All vintages	All vintages

Non-Residential Energy Efficiency

The non-residential energy efficiency ordinance would apply to the following:

- 1. All new non-residential construction, including certain multi-unit residential and hotel/motels;
- 2. Existing non-residential, including certain multi-unit residential and hotels/motels with an:
 - o Addition that increases total roof area by at least 1,000 sq.ft.; or
 - o Alteration with a permit value of at least \$200,000.

Specific requirements associated with this ordinance are provided in Table 2.

Table 2. Energy Efficiency Requirements for Non-Residential Buildings

Requirement	Requirement Details		
Energy Efficiency	Comply with CalGreen Building Standards Tier 1 performance standards and use at least one of the following measures for all applicable components of the project: • Outdoor lighting that is not greater than 90% of the allowed outdoor lighting power and a color temperature no higher than 3000K for hardscape lighting; • Service water heating for restaurants that comply with Section 140.5 of the California Energy Code; • Warehouse dock seal doors required where dock doors are adjacent to conditioned spaces; or • Daylight design power adjustment device(s).		
Renewable Energy	On-site renewable energy sources consistent with CalGreen Tier 1 standards or participate in a renewable energy portfolio program of a local utility provider that provides 75% electric power from renewable energy.		
Elevators, Escalators,	Buildings with more than one elevator or two escalators must provide		
& Other Equipment	controls to reduce energy demand.		
Steel Framing	Projects with steel framing must maximize energy efficiency to avoid thermal bridging per 2019 CalGreen Standards		

Non-Residential Solar Photovoltaics

The solar photovoltaic (PV) ordinance would apply to the following:

- 1. All new non-residential construction, including certain multi-unit residential and hotel/motels;
- 2. Existing non-residential, including certain multi-unit residential and hotels/motels with an:
 - o Addition that increases total roof area by at least 1,000 sq.ft.; or
 - Alteration with a permit value of at least \$1,000,000 that affects at least 75% of gross floor space.
- Note: Exceptions considered for practical infeasibility, alternative on-site renewable generation, greenhouses, enrollment in renewable energy tariff, ground-mounted solar alternative, and façade alterations.

The size of the required PV system varies according Figure 1.

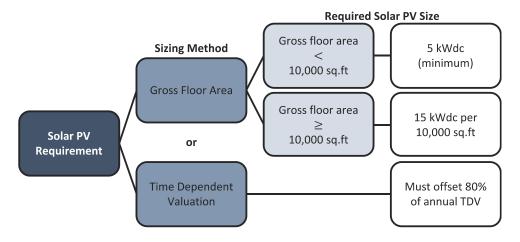


Figure 1. Non-Residential Solar PV Requirement

Residential and Non-Residential Electrification

Specific requirements for electrification ordinances that apply to new residential and non-residential construction have not yet been identified; however, several options are currently being considered that fall along a spectrum of electrification options (

Figure 2).

Electrification Requirements

Electric-Preferred Electrify Specific All-Electric All-Electric (Mixed-fuel okay) Appliances (some exceptions) (no exceptions)

Figure 2. Spectrum of Electrification Options

Electric-Preferred. Electric-preferred ordinances allow for mixed-fuel development, but typically require a higher energy design rating—greater energy efficiency—in a mixed-fuel building relative to an all-electric building.

Electrify Specific Appliances. Local ordinances may permit mixed-fuel development, but specify that specific appliances or equipment be electric. Current ordinances that fall into this category require electrification of one or more combination of the following: water heating, space heating, and and clothes dryers. Other appliances or equipment that may be considered include: fireplace, cooktops (range/oven), and pool/spa heating.

All-Electric (some exceptions). These ordinances require new development to be all-electric, but allow exceptions for specific appliances or equipment to use natural gas. In addition, there may be some ordinances that exempt certain occupancy types from ordinance requirements. Current ordinances that fall into this category permit one or more combination of the following: cooktops (range/oven), fireplaces, and pool and spa equipment.

All-Electric (no exceptions). These ordinances require new development to be all-electric and do not allow exceptions for any appliances or equipment to use natural gas. However, there may be some ordinances that exempt certain occupancy types from ordinance requirements. This approach includes both all-electric reach codes and natural gas bans.

Further Information

For more information on CAP Ordinances, see the City of Encinitas Green Building Ordinance Website at: https://encinitasca.gov/Government/Departments/City-Manager/Environmental-Services/Climate-Action-Plan/Green-Building-Ordinances